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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,293	12/01/2003	Werner Beck	P02,0627-01	2944

7590 11/25/2005

**SCHIFF HARDIN & WAITE**

Patent Department  
6600 Sears Tower  
233 South Wacker Drive  
Chicago, IL 60606

EXAMINER
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ARTMAN, THOMAS R

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/725,293

Applicant(s)

BECK ET AL.

Examiner

Thomas R. Artman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono (US 6,088,425) in view of Cecil (US 4,991,193).

Regarding claim 1, Ono discloses an X-ray unit (Fig. 11), including:

- a) an X-ray source 31 whose triggering for an X-ray shot can be blocked automatically upon reaching a thermal loading limit of the X-ray source 68,
- b) a control device that controls the X-ray source (Fig. 11), and
- c) a display 71 connected to the X-ray unit that displays an indication related to a period of time that the X-ray source requires in order to leave the thermal loading limit once the thermal loading limit has been reached.

Ono does not specifically disclose a control device for unblocking the X-ray source when it is blocked, and thus, there isn't any integrated break-time key disclosed.

Cecil teaches a break-time key 72 for an X-ray unit controller that is initiated to override a display timer (62, 64 and/or 66) that is integrated with the break-time key (via touchscreen 24,

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Fig.2) where the display timer is related to blocking the X-ray unit. This allows the operator to continue X-ray imaging even though the X-ray source has reached a thermal loading limit (col.3, lines 15-20; col.5, lines 8-23, 37-40, 51-67). Such a break-time key is essential in a life-threatening situation where a doctor needs the results fast in order to take the necessary measures to keep the patient alive (col.1, lines 54-59; col.3, lines 45-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for Ono to have a break-time key in order to unblock the X-ray source for the purpose of expediting the diagnostic imaging process in emergency situations, as taught by Cecil.

With respect to claim 2, both Ono and Cecil teach the practice of having the timers as countdown timers (col.14, lines 56-67 of Ono; countdown timer 66 of Cecil).

With respect to claim 3, both Ono and Cecil teach the practice of having text-based percentage showing the remaining time (item 71 of Fig.11 of Ono; col.5, lines 55-59 of Cecil).

Regarding claim 5, Ono discloses a display 71 for showing an indication related to a period of time that an X-ray source requires to leave a thermal loading limit once a thermal loading limit has been reached and a control unit for blocking the X-ray source (Fig.11).

Ono does not specifically disclose a control device for unblocking the X-ray source when it is blocked, and thus, there isn't a break-time key integrated with the display.

Cecil specifically teaches a break-time key 72 integrated with a timer display 66 (all part of touchscreen 24), where the timer is related to blocking the X-ray unit, and where the break-time key is initiated to override the timer in order to continue X-ray shots. This allows the operator to continue X-ray imaging even though the X-ray source has reached a thermal loading limit (col.3, lines 15-20; col.5, lines 8-23, 37-40, 51-67). Such a break-time key is essential in a life-threatening situation where a doctor needs the results fast in order to take the necessary measures to keep the patient alive (col.1, lines 54-59; col.3, lines 45-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for Ono to have an integrated break-time key with the timer display in order to unblock the X-ray source for the purpose of expediting the diagnostic imaging process in emergency situations, as taught by Cecil.

With respect to claim 6, Cecil further teaches that the break-time key is on a touchscreen display 24.

With respect to claims 7 and 8, Cecil further teaches that the key is an integrated display chip of LEDs (basic touchscreen design).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono and Cecil, as applied above to claim 1, in view of Siemens (Generator POLYDOROS).

Neither Ono nor Cecil specifically disclose that the display is a graphical display of the percentage of total time.

Siemens specifically teaches the common use of graphical displays as percentages of a total value of a parameter on pp.13-14. As is known in the art, graphical representations of data provides a much quicker means for a human to ascertain the meaning of data than through words or numbers. Graphical representations are used for a variety of visual aids, such as in meetings and even television advertisements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for Ono to display a graphical representation of a percentage of the total time in order for a human to quickly ascertain the meaning of the data, as is shown by Siemens and is known.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 5 have been fully considered and are persuasive regarding the nature of Cecil's timer and how it is different from the claimed invention. Thus, the 102(b) rejections of claims 1-3 and 5-8 have been withdrawn. However, the claims are currently rejected under 35 USC 103(a) over Ono and Cecil, for the purpose that Ono has the same type of timer as claimed, and Cecil teaches the practice of having an override feature in the form of a break-time key integrated with the display (touchscreen) for allowing imaging to proceed in life-threatening situations.

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*Conclusion*

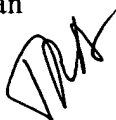
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Codina (US 4,170,735) teaches a device similar to that of Ono, where a timer is set for automatically shutting off the X-ray source until it has sufficiently cooled, and there isn't any override feature claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Artman whose telephone number is (571) 272-2485. The examiner can normally be reached on 9am - 5:30pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas R. Artman  
Patent Examiner



Craig E. Church  
Primary Examiner